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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,569	09/02/2004	Ryozo Setoguchi	108A 3618 PCT	1329

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SUITE 1140
LOS ANGELES, CA 90067

EXAMINER

SMITH, JEFFREY S

ART UNIT	PAPER NUMBER
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2624

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/506,569

Applicant(s)

SETOGUCHI, RYOZO

Examiner

Jeffrey S. Smith

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 September 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 9/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Requirement For Information

1. Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

In response to this requirement, please state if a rejection was made in a corresponding foreign application. If a rejection was made in a corresponding foreign application, please provide a copy of the rejection. For example, if the Japanese Patent Office issued a rejection in the corresponding Japanese application, please submit a copy of the Japanese rejection. If a corresponding application has been filed in Europe and has received a rejection, please submit a copy of the rejection.

This information is relevant to patentability. Applicant is reminded that failure to fully reply to this requirement for information will result in a holding of abandonment. This requirement is an attachment of the enclosed Office action. A complete reply to the enclosed Office action must include a complete reply to this requirement. The time period for reply to this requirement coincides with the time period for reply to the enclosed Office action.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, each element of each

of the claims 1-10 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

3. Figures 1-3 and 10 must be designated by a legend such as --Prior Art-- because only that which is old is illustrated. If figure 3 is new, the new feature shown in figure 3 should be highlighted or this figure must be labeled as Prior Art. See MPEP § 608.02(g).

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 1-8. None of the drawings have reference numbers. Reference numbers must be added to the drawings.

5. The drawings are objected to because Figures 7 and 9 have print that is too small to read.

6. The drawings are objected to because Figure 11 is illegible.

7. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

Art Unit: 2624

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

8. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the elements of claims 1-10 are not disclosed in the detailed description.

9. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Art Unit: 2624

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art. Extensive mechanical and design details of apparatus should not be given.

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In this case, the abstract is several paragraphs. Also, the abstract appears to be a literal translation from a foreign language, which is unreadable in English. For example, the first sentence, which says "Enlarged image display by Jpeg is possible by a browser, compared to the Jpeg image processing" makes no sense. The rest of the abstract is also unreadable.

10. Similarly, the rest of the written description contains words and phrases that are difficult or impossible to understand. Applicant should review the written description and correct the unclear language. Appropriate correction is required.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In claim 1, the disclosure fails to provide support for forming a frequency structure in a dissociation process that is a reduction mapping of wavelet transform. The disclosure fails to provide support for executing wavelet extension mapping in which said frequency structure is recursively used in an extension operation, said frequency structure being preserved. Given the fact that these terms are unknown in the prior art, and are not explained in the disclosure, one of ordinary skill in the art is unable to make or use the method.

The disclosure similarly fails to provide support for claims 2-10.

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

"forming a frequency structure in a dissociation process that is a reduction mapping of wavelet transform" is unclear. This term is unknown in the prior art and is not described in the disclosure. The term by itself does not have a clear meaning.

"executing wavelet extension mapping in which said frequency structure is recursively used in an extension operation, said frequency structure being preserved" is similarly unclear.

"combining a picture image processing, which is based on wavelet transform, with a wavelet extension mapping" is unclear.

"executing thereby a unitary processing" is unclear.

"forming an integration-oriented picture image processing mechanism that has a mechanism which realizes integrated management and control" is unclear.

The other elements of claims 1-10 are similarly unclear.

Also, claims which recite satisfying a client are vague and indefinite because the client's satisfaction is purely subjective.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-5 are directed to a mathematical algorithm without any practical application.

Claims 6-10 are directed to a non-statutory computer program. For example, the medium in claim 6 is not a computer readable medium. The program is not a computer program. Also, the program is not executed by a computer processor.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2 and 6-7 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Number 6,704,452 issued to Takeo ("Takeo").

Although the meaning of claim 1 is unclear, the Examiner interprets forming a frequency structure in a dissociation process that is a reduction mapping of wavelet transform, and executing wavelet extension mapping in which said frequency structure is recursively used in an extension operation, said frequency structure being preserved to mean that a selected portion of the hierarchy of wavelet data sets can be decoded, and the decoded image can be resized. This feature is disclosed by Takeo in column 4 lines 1-16, where the fast mode decodes the coded image data to ½ of the highest resolution and subjects this data to inverse wavelet transform. Then, the decoded image data are enlarged using linear interpolation.

Claim 6, which has the same elements as claim 1, is rejected for this reason.

For claim 2, which recites combining a picture image processing, which is based on wavelet transform, with a wavelet extension mapping, executing thereby a unitary processing, and forming an integration-oriented picture image processing mechanism that has a mechanism which realizes integrated management and control, this is shown in Figures 2A, 2B, and 2C of Takeo, which show combining wavelet transform with wavelet extension mapping and Figure 3 shows a process performed by the mechanism of claim 1 which realizes integrated management and control.

Claim 7, which has the same elements as claim 6, is rejected for this reason.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeo in view of U.S. Patent Number 7,024,046 issued to Dekel et al. ("Dekel").

Takeo discloses the elements of base claims 1 and 2.

Dekel discloses incorporating an integrated picture image processing mechanism, realizing metafile as a retrieval system and utilizing a picture image attribute, and managing and controlling picture image database thereby. For example, Figure 1 of Dekel shows metafile 122 as a retrieval system 110, 120 and utilizing a

picture attribute such as ROI and managing and controlling picture image database thereby as shown in Figure 2 of Dekel.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the database management system of Dekel with the image decoding system of Dekel for the benefit of eliminating the necessity to store a compressed version of the original image as taught by Dekel in the abstract.

Claim 8 which has the same elements as claim 3, is rejected for this reason.

For claim 4, Dekel discloses forming a system that satisfies a client's demand of picture image size and picture image quality by, in addition to a processing function of web server (Figure 1 has web server 140), a function of integrated picture image processing mechanism; and constructing and utilizing server concentrated dynamic picture image database on which a concentrated management is performed (Figure 1 has dynamic picture image database 122 on which a concentrated management is performed as shown in the method of Figure 2).

Claim 9 which has the same elements as claim 4 is rejected for this reason.

For claim 5, Dekel discloses forming a system in which a client satisfies himself with a demand of picture image size and picture image quality in a self reference style (the client selects and changes the ROI until he is satisfied with the demand of picture image size and picture image quality in a self reference style), said client adding and integrating, as a client's function, a function of integrated picture image processing mechanism in addition to a processing function of web server; and constructing client distributed dynamic picture image database on which a dispersive management is

performed (Figure 1 shows the integrated image processing mechanism that processes function of web server, and constructs client distributed dynamic picture image database on which a dispersive management is performed).

Claim 10, which has the same elements has claim 5, is rejected for this reason.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent Number 7,024,046 issued to Dekel et al. discloses a method of using a wavelet transform to selectively increase the size of a region of interest in an image.

European Patent Application Number 1164781 by Watanabe discloses a method of using frequency to enlarge an image in figure 20.

U.S. Patent Number 6,763,139 issued to Andrew discloses a method of using wavelet transform to form a multiple resolution frequency domain representation of an image from a plurality of high frequency subbands.

U.S. Patent Number 7,072,524 issued to Yamada discloses enlarging a low resolution image.

U.S. Patent Number 6,307,569 discloses enlarging an image using wavelet or fractal based techniques in column 1.

Japanese Patent Number 07-152907 discloses a method of enlarging an image using wavelet conversion of image data.

U.S. Patent Number 6,456,745 issued to Bruton et al. discloses a method for resizing an image by operating on its digital transform.

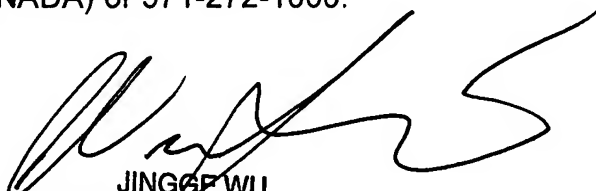
U.S. Patent Number 6,236,765 issued to Acharya discloses a method of constructing an up-sampled version of an image from DWT sub-bands.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey S. Smith whose telephone number is 571 270-1235. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on 571 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JSS
April 12, 2007


JINGGE WU
SUPERVISORY PATENT EXAMINER